



# HI-Q

## THE LAKEHEAD AMATEUR RADIO CLUB JOURNAL

LARC- Suite 184, 1100C Memorial Ave., Thunder Bay, Ontario, Canada, P7B 4A3

VE3FW - LARC call sign - honours the memory of the Founding President - P. J. "Pat" O'Shea

### LARC SENATE

Keith Fiske	VE3JQ
Ray Forslund	VE3EDZ
Pat Doherty	VE3PD
Dave Kimpton	VE3AVS
Bill Klemacki	VE3AJ
Bill Roberts	VE3ARN

### LARC EXECUTIVE 2003-2004

<b>President:</b>	<b>Bill Unger</b>	<b>VE3XT</b> <b>344-1848</b>
<b>Vice-Pres:</b>	<b>Mark Vaillant</b>	<b>VA3MVR</b> <b>935-2205</b>
<b>Secretary:</b>	<b>Bill Klemacki</b>	<b>VE3AJ</b> <b>344-1866</b>
<b>Treasurer:</b>	<b>Ed Baumann</b>	<b>VE3SNW</b> <b>622-1216</b>
<b>Directors:</b>	<b>Terry Stewardson</b>	<b>VA3LU</b> <b>577-9439</b>
	<b>Fred Lesnick</b>	<b>VE3FAL</b> <b>577-0789</b>
	<b>Brad Harris</b>	<b>VE3MXJ</b> <b>767-0628</b>
	<b>Leo Wehrstedt</b>	<b>VE3ATC</b> <b>939-1020</b>
<b>Past Pres:</b>	<b>Bob Hansen</b>	<b>VE3RVA</b>
<b>Editor:</b>	<b>Glen Wallace</b>	<b>VE3ICY</b>

### LARC OPEN ACCESS REPEATERS

VE3YQT	MOUNT BALDY	147.060 (-600)	FP
VE3TBR	ST. JOSEPH'S	146.820 (-600)	FP
		442.075 (+5 MHz)	
VE3BGA	HILLCREST H.S.	145.450 (-600)	
		( IRLP NODE VA3LU 123.0 Hz)	

### The Prez Sez

I would first like to thank Bob; VE3RVA who has been at the helm of the LARC for the last few years and I think has done an excellent job. I don't think we've had a president who has put more of himself into the LARC. Thanks Bob!

I look forward to being the president as well and hope to make the LARC an interesting and fun club.

One of my plans for you is to get each member of the LARC to try one new mode of operation this year. I hope to have guest speakers in talking about HF and VHF SWL'ing, some of the new digital modes, 10 GHz operations and Elink to name a few. Stay tuned!

I will be also on the lookout for members who have brand new or new to them radios. I would hope we may get to you give a short chat on why you like the radio, what made you buy it as compared to another and would you do it again?

We are going to change the format of the meetings a little, we will first have the presentation part of it and then we will finish up with a short business meeting and then head off to Boston. So make sure you're at the **College at 7:30 sharp on October 9.**

Later that week, **Saturday October 11, be sure to attend to Bill's VE3AJ swap fest at his house on Egan Street at 1:30.**

We will also have the grand opening of the LARC trailer. The trailer committee has done a super job of making a communications center for the LARC. Come and check it out, and maybe find a few radio bargains as well.

If there is anything you think that the LARC should be doing or have any questions about where we are going please give me a call and I will try to accommodate you.

73

Bill VE3XT

**Minutes of a Meeting of Lakehead Amateur Radio Club**  
**held in Room 191, Confederation College**  
**September 11, 2003**

The meeting was called to order at 7:40 p.m. by President, VE3RVA, Bob Hansen with 31 members and guests in attendance. A round table was held with members reporting on their summer activities.

**Minutes:** The minutes of June and September will be posted by Glen Wallace, VE3ICY

**Treasurers Report:** no report

**Correspondence:** Thank you notes from: Thunderwolves 20 Miler & Relay and Northern Cancer Research Foundation, Thunder Bay Telephone In-Line Skate for Hope, thanking radio operators.

- letter from Julie Turner, Client Services Representative, Environment Canada, re: Canwarn Amateur Radio Equipment. The radio equipment from Environment Canada's office on Court Street - the repeater tower and cabling have been installed at the Upsala site. The amateur radio equipment for both Canwarn purposes and local emergencies, will be moved to the North Central Fire Station.

**Committee Reports:**

**Equipment** - Terry Stewardson, VA3LU reported that equipment is in working order and all's well.

**RAC North:** No report - **ARES:** no report

**Canwarn:** VA3JMS, John Secek reported that the Canwarn net was activated 6 times during the summer. He thanked all those who reported in, in such a precise and professional manner.

**Public Service:** September 21, 2003, Mother & Daughter Walk to be held at Old Fort William. VE3FAL, Fred Lesnick looking for operators.

**Mobile Command Post:** Mark Valliant, VA3MVR reported that the trailer is finished and looking good, especially in the Post, with article and picture. Mark is working on a Ribbon Cutting ceremony for next month, looking for storage space for the trailer, looking for donations of equipment, prizes and sponsors. Mark passed around pictures, the trailer looks great - Well done and congratulations to all those who worked to get it in such good shape.

**Old Business:** Recognition was given to VA3CLF, Cliff Pratt for his generous donation for the outstanding decals for the Mobile Command Post.

**New Business:** Election of Officers - VE3SNW, Ed Baumann and VA3LU, Terry Stewardson

New officers for the year 2003 - 2004 for the Lakehead Amateur Radio Club are:

President	VE3XT - Bill Unger
Vice-President	VA3MVR - Mark Valliant
Secretary	VE3AJ - Bill Klemacki
Treasurer	VE3SNW - Ed Baumann
Directors	VA3LU - Terry Stewardson
	VE3MXJ - Brad Maxwell
	VE3FAL - Fred Lesnick
	VE3ATC - Leo Wehrstedt
Past President	VE3RVA - Bob Hansen

**Contributed by Judy Artist VA3EAP**



*From Director Fred Lesnick VE3FAL*

Fred  
VE3FAL

Low Frequency DX'ing*From President Bill Unger VE3XT*

Are you looking for something new to try on your HF radio with a general coverage receiver? There is a section of the frequency spectrum from just under 200 kHz to just over 500 kHz that is used for beacons. In “the old days” ships primarily used these stations to triangulate their location at sea. Airplanes also have used these stations to both determine their location and find their way home in inclement weather.

These Non Directional Beacons (NDB's) are typically one to several hundred watt transmitters feeding a vertical antenna. This results in an omni directional pattern. The modulation consists of very slow CW identifier followed by a tone. They were double side band at one time but now are transmitted using USB.

The best time to hear these NDB's is after dark so the fall evenings are perfect to start this form of DX'ing. Set your receiver to USB, and since we are at a very low frequency you do not need a lot of RF gain. In fact if you turn it off you may hear more signals. Remember the RF gain also amplifies the noise as well as the signal. Since the signal is vertically polarized a vertical antenna is also best for receiving. No vertical, no problem, connect the center conductor and the shield of your coax together and you probably will have a vertically polarized antenna. Just remember to reconfigure it before you transmit.

Also the international emergency calling frequency was 500 kHz, and all ships and monitoring stations were required by law to monitor this frequency at 15 past the hour for 3 minutes.

With the advancement of GPS and other Hi tech landing and navigation systems could the days of low frequency beacons be numbered? Here is your chance to hear some radio history!

I am going to take you on a tour of the low frequency beacons now starting with the NDB here in Thunder Bay.

This beacon is called the Tango beacon and it transmits the letter T followed by a long tone on the frequency of 263 kHz.

Now is the time to experiment with your RF gain, bandwidth and IF shift to receive the best tone. Remember if your in Thunder Bay this signal will be very strong so some RF attenuation may be required.

Here is a listing of some of the beacons I have heard from my listening post here in Thunder Bay:

<u>Frequency</u>	<u>Call</u>	<u>Location</u>
205 kHz	XZ	Wawa
209	IB	Atikokan
218	RL	Red Lake
219	YMG	Manitouwadge
223	YYW	Armstrong
230	ZUC	Ignace
233	QN	Nakina
250	YTJ	Terrace Bay
263	ZQT	Thunder Bay



332	QT	Thunder Bay
346	YXL	Sioux Lookout
362	C7	Geralton
372	OGM	
382	YPL	Pickle Lake

Depending on your receiver and antenna set up you may hear more locations. A search on the internet using google will give you a frequency listing of all NDB's in Canada. There are also several good tutorials on the art of NDB DX'ing in the same search results.

And finally to complete this little tour of low frequencies spin up to 500 kHz, the former international calling and distress frequency. Imagine yourself as the ship operator and listening for an SOS from a ship in distress at 15 to 18 past the hour. Unfortunately ships no longer use this frequency but you never know!

Bill Unger VE3XT

*From Senator Bill Klemacki VE3AJ*

Hi There,

El Presidenti said to send you this as Hi-Q has not gone out yet.

Greetings all

Mark your calendars for **Saturday, October 11, 1 PM**. There will be a **GIANT HAM RADIO/Electronics yard sale** at **244 Egan Street**, starting at **1 PM**. Bring your surplus materials, equipment, parts and pieces, and do your own haggling. Your participation could make this a successful beginning of the new season. Limited tables available, but your tailgate is a good spot. The Club's Trailer will also be officially opened.

Pass the word.

73

Bill VE3AJ

*From Rob Van Wyck VE3FLB*

Here is something that came to me today ... thought you might include something about it in the next HiQ VE3FLB

Please go to the website [www.antennareview.ca](http://www.antennareview.ca) and read the facts and issues then answer the questionnaire. Most important that every ham in Canada voice their concerns. The Municipal politicians want control of the antenna support structures in Canada. Read the Discussion page and just underneath of no.6 question click on formal written submissions. You will see what the Municipal politicians want and why. We have 25 to 30 days to fill in this questionnaire, so we need allot of hams and concerned citizens to

participate.

Yours in Hamming

**Bob Earl / VE7SQ**

Asst. RAC Sec Manager / SA for British Columbia

Net Manager BCARAN British Columbia Amateur Radio Awareness net.

Net time 19:30 on 3.729 khz. ( duration 30 mins)

Mon, Wed, Fri.

**From Bill Haskin VA3AY**

I have for sale locally:

1 Radio Shack VHF H/T HTX-202 radio excellent..battery fair....\$50.00

1 Radio Shack UHF H/T HTX-404 radio excellent..battery fair....\$50.00

Yaesu VX-1R Dual band mini-H/T c/w programming software and accessories.....\$100.00

*Please add. Kenwood TS-440SAT c/w PS-50 matching power supply.....\$650.0*

*email [OK...va3ay@rac.ca](mailto:OK...va3ay@rac.ca)*

*344-6189*

*de Bill, VA3AY es 73/*

**CANWARN REPORT**

This summer we reached warning status 6 times, 5 in July and 1 in August, with 1 tornado warning on July 14th. Compared to last year when we had only 2 warnings.

An average of 6 operators checked into the net.

We have now being given access to the Canwarn Net Controller web site. This site is used to type in reports instead of calling the Toronto weather office, as well as a pager to be notified of any severe weather headed to our area.

This now brings us up to date with the tools that our counter parts in Southern Ont use for the Canwarn program

Environment Canada is also looking to have us report on "Winter season" watches and warnings. I will be discussing this further with our contact in Toronto later in the year. Criteria is listed on the Canwarn web site for this.

Thank you to all who participated this summer.

**John Sacek - VA3 JMS**

**From Rob Van Wyck VE3FLB**

From: [al\\_lorona@agilent.com](mailto:al_lorona@agilent.com)

To: [elecraft@mailman.qth.net](mailto:elecraft@mailman.qth.net)

Subject: [Elecraft] Volume

Hi, Everybody,

A recent thread about receiver volume reminded me of an experience that has left a deep impression on me.

I was doing some business up at TriQuint Semiconductor in Oregon about three years ago. That's where Rick Campbell, KK7B, happens to work. Rick, of course, is famous for homebrew direct conversion receivers and lots of other QRP projects.

One of the days I was there, I really lucked in. The TriQuint ham radio club was having a lunch meeting and Rick was the guest speaker. I was invited and couldn't wait to meet him. He presented a design for a simple D-C receiver and crystal-controlled transmitter that was to be a club project. His purpose was to get everybody building something and using it on-the-air. And it was a real cute and elegant design.

Anyway, during the course of his talk, he got off on a tangent in the following manner. He had brought in a prototype of the receiver and transmitter built with brass nails tacked into a wooden board. (He was presenting real simple construction methods as a related topic.) As he spoke, he actually cut a dipole for 40 meters, talked some more, attached the antenna to the receiver, talked more, connected the batteries and the headphones, and suddenly invited the group up to the front to tune around and listen.

The very first guy to put the headphones on listened for a few seconds and then said, "Gee, can't you make it any louder?" And that was Rick's cue. Suddenly, he became passionate. First off, he said that everybody says the same thing about his receivers: that none of them has enough volume. Then he said that we have grown much too accustomed to simply cranking up the volume. "If you're driving and you want to hear something on the radio, you turn it up, but then a few miles down the road you can't quite hear it so you crank it up a little bit more, and what you don't realize is that your ears are, little by little, getting de-sensitized to the sound. You are actually doing damage to your hearing!"

He continued, "The same thing goes for our modern ham receivers. AGC and lots of audio have allowed us to blast our poor ears with sound, and this accounts for the fact that few hams have really good 'ears' anymore!" He went on

a long and fascinating explanation about how in the early days of radio, guys really had excellent 'ears', that they could easily hear below the noise floor, and that crystal radios produced almost no audio, forcing the operator to really develop an acute sense of hearing. He solemnly pulled out a book he had with him of dozens of radio designs from the 20s, 30s and 40s and spoke of incredible feats of tuning and listening.

He actually has a philosophy which involves listening as a matter of habit at vanishingly low audio levels, both to protect his hearing and to maintain that keen sense of hearing that the early pioneers had. He has a quite romantic notion of radio and a deep respect for the skill of those early operators, and he bemoans the fact that all we know how to do is turn it up, up, up until we lose that ability to pull out the weak ones, in the best case, and do damage to our most precious ears in the worst.

I waited my turn in line and when I put the headphones on, sure enough the little output transistor was barely putting any sound into them. I closed my eyes and concentrated on the signal in the receiver. After a few minutes of this, it really is amazing how much you can hear with only a modest effort.

This experience has led me to treasure my ears more and take better care of them, especially when wearing headphones. As for the ability to hear below the noise level, I can only practice, and in the process, interestingly, I am seldom left wanting for much more audio volume in a receiver.

Regards,

Al W6LX

**Editor Says:** Thank you to all the contributors this month, congratulations to the new officers in the club, and thank you to those who contributed so much to the club in the last year. Please send articles of interest to [g.wallace3@shaw.ca](mailto:g.wallace3@shaw.ca)

**See you all at the meeting** **Thursday October 8, Room 191 7:30 PM Confederation College  
Glen Wallace VE3ICY**